

IN THE CLAIMS:

Claims 1-9 (cancelled)

10. (New) A positive electrode active material for battery, wherein,
in a positive electrode active material for battery comprising of electrolytic manganese dioxide,
said electrolytic manganese dioxide has a weight loss at 200°C to 400°C when said electrolytic manganese dioxide is heated of not less than 2.7 wt%.
11. (New) The positive electrode active material for battery as recited in Claim 10, wherein the specific surface area of said electrolytic manganese dioxide is not more than 75 m²/g.
12. (New) The positive electrode active material for battery as recited in Claim 10, wherein the electric potential of said electrolytic manganese dioxide is 270 mV to 320 mV.
13. (New) The positive electrode active material for battery as recited in Claim 11, wherein the electric potential of said electrolytic manganese dioxide is 270 mV to 320 mV.
14. (New) The positive electrode active material for battery as recited in Claim 10, wherein said electrolytic manganese dioxide is obtained by electrolysis with a solution of manganese sulphate and sulfuric acid as the electrolytic solution, at an electrolysis temperature of 85°C to 95°C, an electrolysis current density of 20 A/m² to 50 A/m², and a sulfuric acid concentration of 50 g/l to 100 g/l.
15. (New) The positive electrode active material for battery as recited in Claim 11, wherein said electrolytic manganese dioxide is obtained by electrolysis with a solution of manganese sulphate and sulfuric acid as the electrolytic solution, at an electrolysis temperature of 85°C to 95°C, an electrolysis current density of 20 A/m² to 50 A/m², and a sulfuric acid concentration of 50 g/l to 100 g/l.

16. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 10 is used.

17. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 11 is used.

18. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 12 is used.

19. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 13 is used.

20. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 14 is used.

21. (New) A battery, wherein the positive electrode active material for battery as recited in Claim 15 is used.

22. (New) A method for preparing electrolytic manganese dioxide, wherein, in a method wherein electrolysis is carried out with a solution of manganese sulphate and sulfuric acid as the electrolytic solution to prepare electrolytic manganese dioxide as recited in Claim 10,

electrolysis is carried out at an electrolysis temperature of 85°C to 95°C, an electrolysis current density of 20 A/m² to 50 A/m², and a sulfuric acid concentration of 50 g/l to 100 g/l.

23. (New) The method for preparing electrolytic manganese dioxide as recited in Claim 22, wherein the obtained electrolytic manganese dioxide has a weight loss at 200°C to 400°C when said electrolytic manganese dioxide is heated of not less than 2.7 wt%.

24. (New) The method for preparing electrolytic manganese dioxide as recited in Claim 22, wherein the specific surface area of the obtained electrolytic manganese dioxide is not more than 75 m²/g.

25. (New) The method for preparing electrolytic manganese dioxide as recited in Claim 22, wherein the electric potential of the obtained electrolytic manganese dioxide is 270 mV to 320 mV.